Safety Culture Observation Tool

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TM on Safety Culture Oversight and Assessment

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Safety Culture Observation Tool

- Safety Culture Observation Tool
  - Needs
  - Process
  - Tool
  - Use of results
- Preliminary Results
- Conclusions – Further Work

Safety Culture Observation Tool Needs

- « Degradation of Safety » Culture of some facilities
- Explicit wish of our Board of Directors
- Increasing international interest
- Difficulty for quantitative measurement
- How to interprete it / use the results ?

Safety Culture Observation Tool Objectives & Basis

- Support to inspectors from regulatory body for observing issues related to safety culture
- Provide a systematic approach and coherent framework for these observations
- Allow consolidation and use of observation results within regulator framework
  - Identification of trends
- Not an instrument to measure safety culture
- Basis
  - Attributes of safety culture as described in IAEA documents :
    - INSAG-4 Safety Culture
    - INSAG-13 Management of Operational Safety in Nuclear Power Plants
    - INSAG-15 Key Practical Issues in Strengthening Safety Culture
    - Safety Guide GS-G-3.1 Application of Management System for Facilities and Activities
    - SCART Guidelines
  - Chester Workshop outcome
  - …

Safety Culture Observation Tool General Process

- Daily: collection of observations by regulator (FANC and Bel V)
- Monthly: consolidation of observations per licensee by regulator (FANC and Bel V) :
  - Control and validation of observations by dedicated people form FANC and Bel V
  - Consolidation of all observations by Safety Culture coordinator (FANC)
- Quarterly:
  - Report on safety culture is fixed agenda-item during monthly meeting between FANC and Bel V
  - Identification of immediate actions –if needed
- Yearly:
  - Global evaluation of trends in safety culture per licensee (positive and negative trends); documented in yearly safety assessment report by regulator
  - Discussion with licensee during "management inspections"
  - Integration of results in Inspection Program
  - Evaluation and adaptation of methodology (indicators & guidance, training, …) – if needed

Description of Safety Culture Observation Tool

- Set of 20 "indicators", grouped in 5 "themes" in 1 recto/verso page, containing following information
  - Expert
  - Facility
  - Type of contact
  - Date
  - Reference to report (for validation purposes)
  - Observations per indicator (positive/negative + description)

Low threshold
May be handwritten
No specific software application

- Additional Guidance, covering general management down to individuals
  - A5 Booklet format, 12 pages

Easy to carry

- When to use ➔ After EACH contact with licensee
  - Inspection (routine, thematic, reactive)
  - Meetings
    - Evaluation of safety documents
    - …
  - …

No observations = allowed

- Training
  - 1 day session for everybody (pilot use started that day !)
  - Refresher training if needed (see process)

5 Themes – 20 indicators

A. Safety is clearly recognized value	**D. Safety is integrated into all activities**
A1 : commitment of management to safety	D1 : Quality of documentation & procedures
A2 : Proactive and long term approach to safety	D2 : Quality, knowledge and understanding of work processes
A3 : Safety conscious work environment	D3 : Work motivation, job satisfaction, time pressures, workload and stress
B. Leadership for safety	D4 : Cross-functional and interdisciplinary cooperation and teamwork
B1 : Involvement of management in safety related activities	D5 : Housekeeping and material conditions of plant
B2 : Sufficiency of resources (personnel, equipment, procedures, other) to assure safety	
B3 : Consideration of safety implications in change management	**E. Safety is learning driven**
B4 : Open and effective communication between management and work force	E1 : Training of plant staff & Competence development
C. Accountability for safety	E2 : Problem identification, evaluation and resolution
C1 : Roles and responsibilities are clearly defined, understood and reinforced	E3 : Use of internal and external operating experience
C2 : Compliance with regulations, rules and procedures	E4 : Use of internal and external assessments
C3 : Ownership for safety at all organizational levels	
C4 : Relationship with the regulator	

Additional Guidance-Example

INDICATOR D2: QUALITY, KNOWLEDGE AND UNDERSTANDING OF WORK PROCESSES

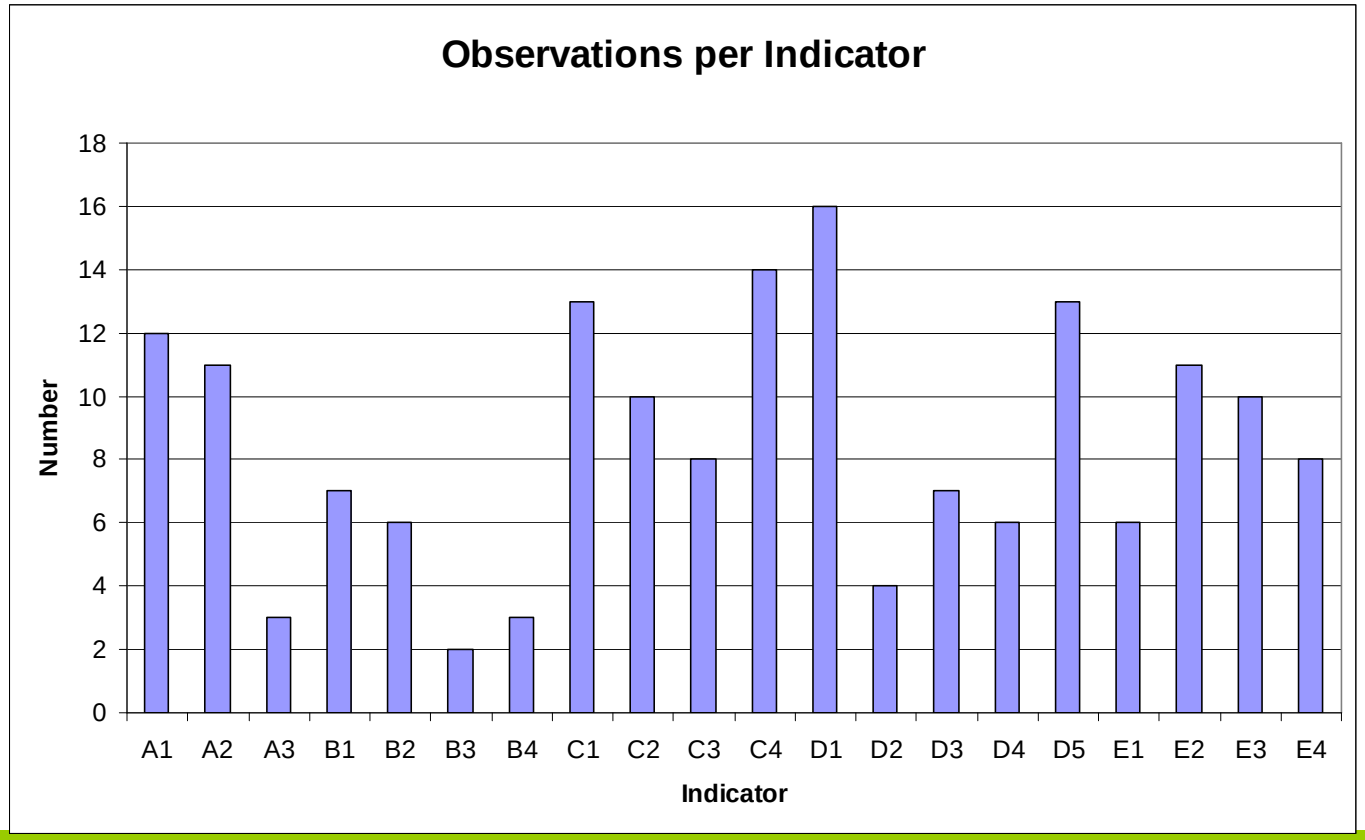
+ Process documentation is up to date
+ Processes for planning and controlling work ensure that individuals, supervisors and work groups communicate, coordinate and execute their work activities in a manner that supports safety
+ Existence of a systematic process for preparing plant for start-up or for maintenance
+ Adequate application of QA principles
+ Process for approval before deviating from already approved plans/procedures is defined, known and applied
+ Adequate process performance oversight and review
+ Adequate oversight and control of contractors

o Application by plant staff of prescribed work processes
o Understanding by staff members and contractors of safety implications related to work processes
o Awareness with staff members and contractors of particular cautions and safety limits they have to observe in their job / Awareness of what would happen if safety limits are not respected

– Low status of QA function
– QA findings often ignored or not addressed
– Lack of reliable information and general limited understanding of process
– Poor pre-work planning
– Inadequate risk assessment
– Poor communications or permit-to-work systems

Preliminary Results (3 months)

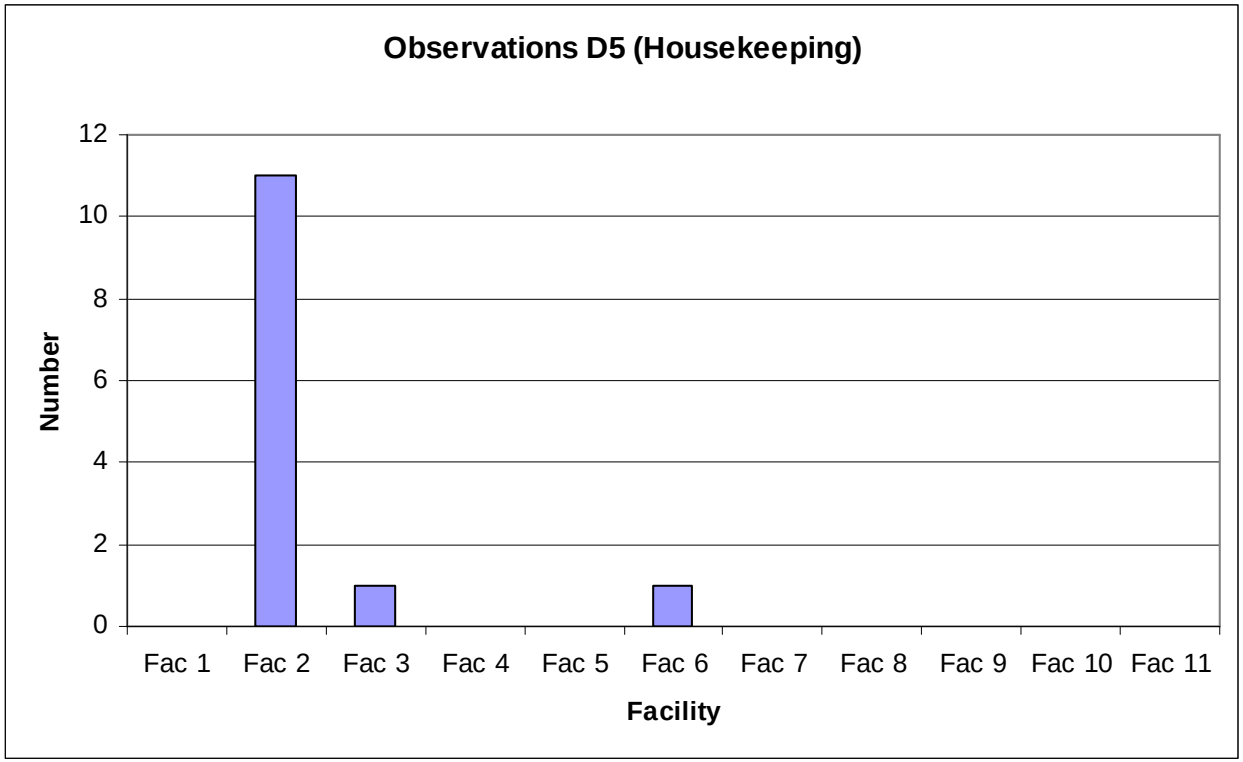
- 170 Observations
- Observations in all indicators
- High number = problem area ? (e.g. D5 : Housekeeping)



Drill Down : D5 - Housekeeping

- Mainly 1 licensee
- Issue on house keeping with this facility ?
  - Observations by several people on several occasions

Corrective actions



Conclusions – Further Work

- Simple Tool for observations with respect to Safety Culture
  - Complete ?
  - Meets our objectives ?
  - Results useable ?
  - Common understanding on Safety Culture ?
- Process covers various aspects
  - Collecting data
  - Analysing data
  - Feedback
    - Licensees
    - Inspectors
  - Lessons learnt

Questions ?

Make it as Simple as Possible

But …

Not Simpler

(A. Einstein)